TOPIC: TACTICAL CONSIDERATIONS – WILDLAND/URBAN INTERFACE

TIME FRAME: 2:30

LEVEL of INSTRUCTION: Level II

TERMINAL LEARNING OBJECTIVE: At the end of this topic, a student, given leaders intent, concepts of wildland perimeter control, wildland structure environment, elements of area orientation, and situation and fire behavior forecasting, will be able to determine tactical maneuvers and tactical actions, so that an appropriate tactical engagement process is determined utilizing the FIRESCOPE WUI placarding system.

ENABLING LEARNING OBJECTIVES:

1. Describe leaders intent
2. Determine the concept of wildland perimeter control and the wildland structure environment
3. Describe the importance of orienting yourself to the area, situation and fire behavior forecasting
4. Describe structure protection size up, triage guidelines, protection guidelines, protections strategies and protection tactics
5. Describe tactical maneuver and tactical actions
6. Describe the tactical engagement process – PACE
7. Determine the level of engagement – DRAW D
8. Determine how to use the FIRESCOPE WUI placarding system

MATERIALS NEEDED:
- Writing board/pad with markers/erasers
- Appropriate audiovisual equipment and screen
- Appropriate audiovisual materials

REFERENCES:
- Field Operations Guidebook (FOG), ICS 420-1
- Wildland Urban Interface Operating Principles, 1st Edition 2014, California Department of Forestry and Fire Protection
**PREPARATION:** Each year more of California’s residents move into wildland/urban interface areas, creating further potential for lives and property to be threatened during our many wildland fires. Committing to the defense of these homes places firefighters in even more danger than in a purely wildland situation. Taking an often defensive stand in the face of an oncoming wildland fire, places us in an extremely vulnerable position. Implementing the tactical guidelines in this lesson will allow you and your team to achieve safe and effective operations.
## I. ENABLING OBJECTIVES

A. Describe Leaders Intent

B. Determine the concept of wildland perimeter control and the wildland structure environment

C. Describe the importance of orienting yourself to the area, situation and fire behavior forecasting

D. Describe structure protection size up, triage guidelines, protection guidelines, protection strategies and protection tactics

E. Describe tactical maneuver and tactical actions

F. Describe the tactical engagement process – PACE

G. Determine the levels of engagement – DRAW D

H. Determine how to use the FIRESCOPE WUI placardng system

## II. PREAMBLE

A. There are three national “field” documents relating to Wildland Urban Interface

   1. California FIRESCOPE FOG ICS 420-1
   2. NWCG Incident Response Pocket Guide

   Refer to Student Information Sheet 4-3-1

B. For the purposes of this curriculum, we will be following the California FIRESCOPE FOG format

C. It is important to understand that there are differences in WUI terminology with reference to these three documents
D. The challenge will come when out of state resources come into California who may be unfamiliar with the FIRESCOPE terminology when assigned to WUI operations

E. Strike Team / Task Force Leaders may be called upon to assist in bringing these resources up to speed

III. LEADERS INTENT

A. The first and foremost intent during structure defense is to keep firefighters and the public safe

B. Secondly, once that safety can be ensured, then we can aggressively work towards keeping the wildland fire away from structures and communities

C. The development of all strategies and tactics should utilize the Risk Management process to ensure firefighter safety

D. Defending structures from a wildland fire will not be possible in every situation

E. Risk to firefighters, fire behavior and availability of resources will dictate the strategies that will be used.

F. When there is a need to engage in structure defense, firefighters will ensure that they are taking safe appropriate and reasonable tactical actions for which they are trained and equipped

IV. WILDLAND STRUCTURE ENVIRONMENT

A. When making decisions on structure defense, you must consider the overall environment where the structures are located

B. There are two basic structure environments in the wildland
1. Interface – a condition where structures abut the wildland
   a) There is a clear line of demarcation between the structures and the wildland fuels along roads or back fences
   b) Usually identified as housing tracts or developments adjacent to a wildland area
   c) There is a greater potential for house-to-house ignition.

2. Intermix – a condition where structures are scattered throughout a wildland area
   a) There is no clear line of demarcation; the wildland fuels are continuous outside of and within the developed area
   b) Each structure must be assessed independently
   c) Usually more complex to triage than an interface condition
   d) Usually requires a higher ratio of engines to structures than an interface condition

V. DEFINITIONS

A. Safety Zone
   1. A preplanned area of sufficient size and suitable location that is expected to protect fire personnel from known hazards without using fire shelters

B. Temporary Refuge Area (TRA)
   1. A preplanned area where firefighters can immediately take refuge for temporary shelter and short-term relief without using a fire shelter
in the event that emergency egress to an established Safety Zone is compromised.

a) Examples
   a) Lee side of structure
   b) Inside of structure
   c) Large lawn or parking area
   d) Cab of apparatus

2. Note
   a) Although Safety Zones and viable Escape Routes shall always be identified in the WUI environment, they may not be immediately available should the fire behavior increase unexpectedly
   b) Often a Temporary Refuge Area (TRA) is more accessible in the WUI environment
   c) A TRA will provide temporary shelter and short-term relief from an approaching fire without the use of a fire shelter and allow the responders to develop an alternate plan to safely survive the increase in fire behavior

C. Always have an exit strategy
   1. Employ tactical maneuver to avoid heat injury, move away from the fire
   2. Move to a Temporary Refuge Area
   3. Withdraw along an Escape Route
   4. Move into a Safety Zone

VI. FIRE BEHAVIOR FORECASTING
A. Firefighter and public safety is the first priority in every fire management activity

B. Using the Standard Firefighting Orders, firefighters are guided to make a fire behavior forecast that considers the fire's potential at the time of contact with the structure

C. If at any time the risk to firefighters is determined to be too great, an alternative action should be selected

D. It is important to remember that fire conditions can change very quickly, so constant observation and reassessment is necessary

E. The tactic selected may need to change

F. Tactical maneuver or agility is essential to ensure firefighter safety

G. Use standardized references to validate your fire behavior forecast
   1. Incident Response Pocket Guide (IRPG)
   2. Look Up, Look Down, Look Around indicators
   3. Extreme Fire Behavior indicators
      a) Spotting
      b) Crowning
      c) Rate of spread
   4. Campbell Prediction System (CPS)
   5. Know what the fire is doing at all times in order to maintain an accurate fire behavior forecast.
6. Know current weather conditions and forecasts. Consider wind speed, direction, relative humidity, temperatures

7. Observe current burning activity in order to predict flame length and intensity

8. Consider local weather factors and fire history

9. Evaluate for wind shifts, micro-climates, weather indicators and hazards

10. Evaluate surrounding fuels for type. Height, continuity and conditions

VII. STRUCTURE DEFENSE SIZE-UP

A. Select the appropriate structure triage category based on the forecasted fire behavior, the surrounding area terrain and any defensible space:

1. Not Threatened
   a) Safety Zone and TRA are present and construction features or defensible space make it unlikely that the structure will ignite during initial fire front contact

2. Threatened Defensible
   a) Safety Zone and TRA are present and construction features, lack of defensible space, or other challenges requires firefighters to implement structure protection tactics during fire front contact

3. Threatened Non-Defensible
   a) Either there is no Safety Zone or TRA present and/or the structure has challenges that do not allow firefighters to safely commit to stay and protect the structure during fire front contact
VIII. STRUCTURE TRIAGE GUIDELINES

A. Consider the following factors during structure triage

1. Forecasted fire behavior and intensity – the greater the intensity, the greater the defensible space required

2. Safety Zones should be identified and designated based upon forecasted fire behavior

3. Temporary Refuge Areas (TRS) should be preplanned and identified in the event that emergency egress to an established Safety Zone is compromised

4. Is there adequate space to park your apparatus safely based upon forecasted fire behavior?

5. Do you have adequate lookout and communication capability?

6. Evaluate the proximity of the fuels and forecasted flame lengths in relation to the structure; is there defensible space?
   a) What is the position of the structure on the slope relative to fire spread?
   b) Avoid narrow canyon bottoms, mid-slopes with fire below, or narrow ridges near chimneys and saddles

7. Are there narrow roads, unknown bridge limits and septic tank hazards?

8. Are there ornamental plants and combustible debris and other ember traps?

9. Are there power lines adjacent to the structure?
10. Is there an adequate water supply to support the necessary flow rates and GPM output?

11. Did the property owners remain onsite?

12. Does the structure have a flammable roof and/or siding? (Wood roof and siding and/or vinyl siding, along with inadequate defensible space, may make the structure impossible to protect)

IX. STRUCTURE DEFENSE GUIDELINES

A. Personal Protective Equipment (PPE)
   1. Structure defense tactics can be undertaken utilizing standard wildland PPE
   2. If the structure becomes involved in fire and a decision is made to extinguish the fire, utilize the appropriate Structure Fire PPE including SCBA’s as required
   3. DO NOT enter a structure to extinguish a fire inside the structure unless you are trained, equipped, and authorized
   4. DO NOT base your decision to remain at a structure and/or the safety of your personnel on the use of SCBA’s

B. Equipment Placement
   1. Identify Escape Routes, Safety Zones and TRA’s and make them known to all personnel
   2. STAY MOBILE and wear all of your PPE
   3. Back equipment in for a quick escape
   4. Park in a cleared area (watch for overhead hazards)
5. Protect your equipment (park behind the structure, placing the structure between equipment and fire front, be aware of spot fires occurring behind you)

6. Watch for hazards (drop-offs, pot holes, above-ground fuel storage, chemicals and septic tanks)

7. Keep egress routes clear

8. Have an engine/personnel protection line charged and readily available

9. Avoid long hose lays

10. Try to keep sight contact with all personnel

C. Water Use Guidelines

1. Keep at least 100 gallons of water reserve in your tank

2. Top off your tank at every opportunity, use a garden hose

3. Draft from a swimming pool, hot tub. Or fishpond

4. Stay mobile. Be aware that hydrants may not always work if the system is electrically powered and power is lost in the area

5. Conserve water, avoid wetting down an area

6. Apply water only if it controls fire spread or significantly reduces the heating of the structure being protected

7. Keep fire out of the heavier fuels

8. Extinguish fire at its lowest intensity, not when it is flaring up
9. Knock down fire in the lighter fuels

10. Have enough water to last for the duration of the main heat wave and to protect personnel

D. Class A Foam/Gel Use Guidelines

1. Direct Attack with Class A foam – apply to the base of flame

2. Apply Class A Foam to structure (roof and siding) ten to fifteen minutes before fire arrives

3. Foam or gel the structure and the vegetation immediately surrounding the structure

E. Preparing the Structure

1. Determine if residents are home. If so, advise them to leave

2. For roof access, place the owner’s ladder at a corner of the structure on the side with the least fire threat and away from the power drop

3. Clear the area around above-ground fuel tanks, shutting off tanks

4. Place combustible outside furniture inside the structure

5. Close windows and doors, including garage, leaving unlocked

6. Remove combustibles immediately next to the structure and scatter firewood

7. Construct a fire line around out-buildings, power poles and fuel tanks

8. Remove vegetation from the immediate area of the structure
9. Have garden hose(s) charged and placed strategically around structure for immediate use

10. MAY USE THE STRUCTURE AS A TEMPORARY REFUGE AREA (TRA)

X. STRUCTURE DEFENSE STRATEGIES

A. In our profession, what does the term “Strategy” mean?

1. Answer: “A careful plan or method for achieving a particular goal”
2. It’s basically “The Plan”
3. The written plan is the IAP

NOTE: HAVE THE STUDENTS READ THE WUI SECTION OF THE ICS 420-1 FOG TITLED: “STRUCTURE DEFENSE STRATEGIES”

B. Answer the following questions

1. Can an incident have more than one strategy?
   a) Answer: Yes

2. Do the types and number of resources, ie: engines, crews, dozers impact the success of the strategy?
   a) Answer: Yes

3. Can the strategy change?
   a) Answer: Yes

4. List three reasons that can change strategy
   a) Weather, Fire Behavior, resource availability, change in objectives
XI. STRUCTURE DEFENSE TACTICS

A. In our profession, what does the term “Tactics” mean?

1. Answer: “The art or skill of employing available means to accomplish an end"

NOTE: HAVE STUDENTS READ THE WUI SECTION OF THE ICS 420-1 FOG TITLED: “STRUCTURE DEFENSE TACTICS”

B. Answer the following questions

1. Are tactics the same thing as objectives?
   a) Answer: No; Tactics are actions, Objectives are goals.
   b) Where the strategy gives firefighters a general plan, tactics are the specific actions firefighters will take to accomplish the incident objectives

2. Who chooses which tactic to use?
   a) Incident Commander
   b) Operations Section Chief
   c) Unit or Resource Supervisor

3. The chosen tactical action must be capable of stopping the advance of the fire or preventing the fire from damaging property and doing so without incurring injuries to firefighting personnel

4. Is Fire Behavior Forecasting critical to tactical actions?
   a) Answer: Yes
b) Making an accurate fire behavior forecast in advance of the fire’s arrival is the wildland firefighter’s greatest challenge

5. Can fire behavior forecasting be done with absolute certainty?

a) Answer: No

b) But, it serves as the basis for determining if a tactical action will be effective and safe

c) Recognizing that there is always the potential for error in our fire behavior forecast means that we must compensate for the uncertainties by having alternative actions (tactical maneuver)

d) The key point here is to never get locked into a single plan of action

XII. TACTICAL MANEUVER

A. Tactical maneuver implies movement or purposeful reaction to change

B. Tactical maneuver builds agility into a tactical plan by allowing resources to work and move around in a hazardous environment without injury, while remaining effective

C. Tactical maneuver is most effective when potential changes to the primary plan have been identified and firefighter’s reactions to those changes are planned out

NOTE: HAVE THE STUDENTS READ THE WUI SECTION OF THE ICS 420-1 FOG TITLED: “TACTICAL MANEUVER”

D. Firefighters must be prepared to utilize tactical maneuver when changing from structure defense
mode (defensive) to suppression mode (offensive) when fire behavior allows.

E. It is imperative to take advantage of situations that allow for firefighters to take perimeter control actions and suppress the fire.

F. Tactical planning must be developed in conjunction with anticipated changes in the fire environment or fire behavior.

1. Tactical maneuver (agility) is essential to ensure firefighter safety since legitimate Safety Zones are not always immediately present in the WUI.

2. Firefighters should focus on *agile tactical solutions* to unanticipated changes as opposed to a rigid and inflexible siege approach.

3. It is imperative that contingency planning be part of every tactical plan.

4. The tactic selected may need to change to compensate for a change in the fire’s behavior.

5. Always have a way out!

G. Tactical maneuver can be an offensive or defensive action

H. Be prepared to move decisively during lulls in fire activity or take shelter in Temporary Refuge Areas or Safety Zones when the fire is active.

1. Examples of tactical maneuver would be an engine crew going from one structure to another, moving with fire, or staying behind a house when the fire is hitting hard and moving into full suppression mode when the fire subsides.
2. This requires a continuous assessment of the fire and it's potential.

3. Crews must continually identify Temporary Refuge Areas and Escape Routes to Safety Zones.

XIII. STRUCTURE DEFENSE TACTICAL ACTIONS

A. After making a fire behavior forecast and triaging the assigned structures, responders must now implement the necessary tactics to defend the structure from the advancing fire front.

B. Supervisors must keep in close communication with those they supervise and adjoining forces in the area.

C. The following are the seven tactical actions available to structure protection resources:

1. CHECK AND GO
2. PREP AND GO
3. PREP AND DEFEND
4. FIRE FRONT FOLLOWING
5. BUMP AND RUN
6. ANCHOR AND HOLD
7. TACTICAL PATROL

D. Check and Go

1. "Check and Go" is a rapid evaluation to check for occupants requiring removal or rescue:
   a) Structure Triage Category – Threatened Non-Defensible
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<th>PRESENTATION</th>
<th>APPLICATION</th>
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<td>b) The tactic is most appropriate when there is no Safety Zone or TRA present and the forecasted spread, intensity, and the projected impact time of the fire front prohibit resources from taking preparation action to protect the structure.</td>
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<td>c) Complete a rapid evaluation to check for occupants at a structure, evaluate life threat and assist in evacuation.</td>
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<td>d) Used when fire spread, intensity, lack of time or inadequate defensible space prohibit firefighting resources from safely taking action to protect the home when the fire front arrives.</td>
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<td>e) Evaluate the structure for follow-up action when additional resources become available, the fire front passes or fire behavior intensity is reduced.</td>
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E. Prep and Go

1. “Prep and Go” implies that some preparation of the structure may be safely completed prior to resources leaving the area:

a) Structure Triage Category – Threatened Non-Defensible.

b) A tactic used when a Safety Zone and TRA are not present and/or when fire spread and intensity are too dangerous to stay in the area when the fire front arrives, but there is adequate time to prepare a structure for defense ahead of the fire front.

c) Utilized for structures where potential fire intensity makes it too dangerous for fire
d) There is some time to prepare a structure ahead of the fire: resources should engage in rapid, prioritized fire protection preparations and foam the structure prior to leaving.

e) Resources should leave with adequate time to avoid the loss of Escape Routes.

f) Advise residents to leave and notify supervisors of any residents who choose to stay so that you can follow up on their welfare after the fire front passes.

g) As with Check and Go, Prep and Go is well suited for engine strike teams and task forces.

F. Prep and Defend

1. “Prep and Defend” is a tactic used when a Safety Zone and TRA are present and adequate time exists to safely prepare a structure for defense prior to the arrival of a fire front:

   a) Structure Triage Category – Threatened Defensible

   b) An ideal multiple resource tactic especially in common neighborhoods where efforts may be coordinated over a wide area.

      a) A tactic used when it is possible for fire resources to stay when the fire front arrives.
b) Fire behavior MUST be such that it is safe for firefighters to remain and engage the fire.

c) Adequate Escape Routes to Safety Zone must be identified. A Safety Zone or TRA must exist on site.

d) Firefighters must be vigilant to sudden changes in fire intensity and be prepared to move to the TRA or withdraw along the Escape Route to the Safety Zone.

e) Adequate time must exist to safely prepare the structure for defense prior to the arrival of the fire front.

G. Fire Front Following

1. “Fire Front Following” is a follow-up tactic employed when Check and Go, Prep and Go, or Bump and Run tactics are initially used:

   a) A tactic used to come in behind the fire front.

   b) This action is taken when there is insufficient time to safely set up ahead of the fire or the intensity of the fire would likely cause injury to personnel located in front of the fire.

   c) The goal of “Fire Front Following” is to search for victims, effect perimeter control, extinguish spot fires around structures, control hot spots and reduce ember production.

H. Bump and Run

   a) “Bump and Run” is a tactic where resources typically move ahead of the fire front in the spotting zone to extinguish
spot fires and hot spots, and to defend as many structures as possible:

a) Bump and Run may be effective in the early stages of an incident when the resource commitment is light and structure protection is the priority.

b) Bump and Run may also be used on fast moving incidents when there are adequate resources available, but where an effort must be made to control or steer the head and shoulders of the fire to a desired end point.

c) Perimeter control and structure protection preparation are secondary considerations with the Bump and Run tactic.

d) Resources must remain mobile during Bump and Run and must constantly identify Escape Routes to Safety Zones and TRA’s as they move with the fire front.

e) Bump and Run is a defensive tactic when fire front impact in the WUI is imminent and there are not enough resources to effectively take perimeter control action. It is an offensive tactic when resources are steering the head of the fire to a desirable end point.

f) The tactic is useful when terrain and fuels are suitable for mobile attack.

g) Fire line supervisors and Strike Team/Task Force Leaders must
realize that Bump and Run places resources in front of the advancing fire front and that extreme caution should be exercised.

h) Control lines in front of the fire should be identified and prepared with dozers and fire crews enabling the Bump and Run resources to direct the fire to a logical end point.

b) This is a frontal attack strategy and a watch out situation. Control lines in front of the main fire must be reinforced with retardant drops, coordinated firing operations and engine support.

I. Anchor and Hold

1. “Anchor and Hold” is a tactic utilizing control lines and large water streams from fixed water supplies in an attempt to stop fire spread.

a) The goal is to extinguish structure fires, protect exposures, and reduce ember production.

b) Anchor and Hold can be referred to as taking a stand to stop the progression of the fire.

c) Anchor and Hold tactics are more effective in urban neighborhoods where the fire is spreading from house to house.

d) Establishing an Anchor and Hold line requires considerable planning and effort and utilizes both fixed and mobile resources:
a) Fixed engines should be spotted in safe areas where they can safely withstand any fire situation.

b) Mobile engines or task forces can engage in individual structure defense actions or perimeter control and re-supply from fixed water sources.

c) Mobile engines should be prepared to re-deploy to other areas should the fire escape the Anchor and Hold line.

e) Ground resources, such as engine crews and hand crews should staff hose lines and be prepared to extinguish hot spots, fire perimeter and structures:

a) Hand crew strike teams should be deployed to construct fire control lines wherever needed and conduct firing operations.

J. Tactical Patrol

1. “Tactical Patrol” is a tactic where the key element is mobility and continuous monitoring of an assigned area:

a) Tactical Patrol can either be initiated:

a) After the main fire front has passed and flames have subsided but when the threat to structures still remains.

- Patrol areas where the fire has passed but the risk to structures remains from fire brands smoldering in void spaces, on roofs, in rain
gutters and stored material near buildings.

b) In neighborhoods away from the interface where there is predicted to be significant ember cast and accumulated ornamental vegetation.

- The goal is to patrol areas downwind of potential ember showers.
- This tactic should be used to extinguish hot spots or secondary structure ignitions, and address safety issues such as power lines, weakened trees and other hazards.

c) Vigilance, situational awareness and active suppression actions are a must.

NOTE: HAVE STUDENTS READ THE 9 WILDLAND FIRE MANAGEMENT GUIDING PRINCIPLES (APPENDIX A) IN THE WUI SECTION OF THE ICS 420-1 FOG AND DISCUSS (THEY ARE PRESENTED BELOW)

XIV. WILDLAND FIRE MANAGEMENT GUIDING PRINCIPLES

A. The first priority for all-hazard decisions is human survival, both firefighters and the public.

B. Incident containment strategies specifically address and integrate protection of defendable improved property and wildland values.

C. Direct protection of improved property is undertaken when it is safe to do so, where there are sufficient time and appropriate resources available, and when
the action directly contributes to achieving the overall incident objectives.

D. The firefighter’s decision to accept direction to engage in structure protection actions is based on the determination that the property is defendable and the risk to firefighters can be safely mitigated under the current or potential fire conditions.

E. A decision to delay or withdraw from structure protection operations is the appropriate course of action when made in consideration of firefighter safety, current or potential fire behavior, or lack of defensibility of the structure or groups of structures.

F. Firefighters at all levels are responsible for making risk decisions appropriate to their individual knowledge, experience, training and situational awareness.

G. Every firefighter is responsible for awareness of the factors that affect their judgement and the decision-making process, including a realistic perception of their own knowledge, skills, and abilities, the presence of life threat or structures, fire behavior, availability of resources, social/political pressures, mission focus, and personal distractions such as home, work, health and fatigue.

H. An individual’s ability to assimilate all available factors affecting situational awareness is limited in a dynamic wildland and urban interface environment.

I. It is the responsibility of every firefighter to participate in the flow of information with supervisors, subordinates and peers. Clear and concise communication is essential to overcome limitations in situational awareness.

XV. TACTICAL ENGAGEMENT PROCESS – PACE
A. Structure defense firefighting in the Wildland Urban Interface is inherently dangerous because it is primarily associated with indirect firefighting.

1. An approaching fire is a dynamic event and subject to sudden changes that can be very difficult to anticipate.

2. Structure protection should start with a determination of the exit strategy.

B. Indirect firefighting safety mitigations depend on fire behavior forecasts made in advance of the fire’s arrival.

1. Accurate fire behavior forecasts are difficult to make with absolute certainty and, at the same time;

2. these forecasts are the crux for determining effective safety mitigations
   a) Temporary Refuge Areas
   b) Escape Routes
   c) Safety Zones

C. With firefighter safety hanging in the balance of accurate fire behavior estimates that cannot be assured, it is imperative that a multi-step safety plan be established to compensate for the uncertainties.

D. Firefighters must anticipate the unexpected and build agility (Tactical Maneuver) into their plan with contingency planning. The lexicon for contingency planning is PACE.

1. P – Primary Plan (Offense)
   a) Is focused on firefighter safety
   b) Is focused on mission objectives
3. C – Contingency Plan (Defense)
   a) A plan totally focused on the firefighter's safety
   b) Move to a Temporary Refuge Area (an area that provides short-term relief) or withdraw along the Escape Route
   c) Move into a Safety Zone

4. E – Emergency Plan (Defense)
   a) A plan totally focused on individual firefighter survival
   b) When threatened by fire, firefighters should get into their fire shelter

E. ALWAYS HAVE A DEPLOYMENT SITE IDENTIFIED!

1. Implement PACE prior to engaging in any structure protection action:
   a) P – Primary
b) A – Alternate  
c) C – Contingency  
d) E – Emergency  

XVI. LEVELS OF ENGAGEMENT – DRAW-D  

A. As with military operations, there are FIVE Levels of Engagement in firefighting – DRAW-D.  

B. These actions apply to all aspects of wildland firefighting from the incident strategy to the individual line assignments and structure protection.  

C. They identify a thoughtful and mindful approach to choosing the appropriate tactical action.  

D. Use of DRAW-D as Levels of Engagement incorporates a “can-do” attitude in every Level of Engagement and every Level of Engagement is equal in value to the overall effort as the other:  

1. D – Defend  
   a) Holding actions, protecting priority areas  
   b) Protect the structures  
   c) Hold and improve the line  

2. R – Reinforce  
   a) Bring more resources to bear  
   b) Add resources necessary to advance or defend  

3. A – Advance  
   a) Anchor and Flank  
   b) Direct or indirect attack
c) Active burnout operations

4. W – Withdraw
   a) Cease current activities until conditions modify
   b) Abandon an established position or constructed line in response to an increase in fire intensity
   c) Not a stigma, but a decision to move away from a threat

5. D – Delay
   a) Wait until the situation has modified sufficiently to allow a different Level of Engagement
   b) Waiting for conditions to meet pre-identified triggers necessary to advance or defend

XVII. WUI PLACARD

A. The WUI Placard (ICS 231) is designed to document property information found during structure assessment (at a specific point in time)

B. The WUI Placard allows the firefighters to communicate a basic assessment of conditions to other responding units

C. Instructions for completing the placard are illustrated step by step in the power point presentation
**SUMMARY:**

As a Strike Team/Task Force Leader on a wildland/urban interface fire, it is vital to distinguish between wildland perimeter control and structure protection, and know to which you are assigned. Once committed to structure protection, you should orient yourself to the area and situation, know and implement the structure triage guidelines, the components of structure assessment, and the structure protection guidelines. You must bear in mind at all times that structure protection places you in an unusually vulnerable position in a wildland fire environment.

**EVALUATION:**

The student will complete a written quiz at a time determined by the instructor.

**ASSIGNMENT:**

Review your notes and read the appropriate section(s) in the student supplement in preparation for the upcoming quiz. Study for the next session.